Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Brick and Tile Corporation of Lawrenceville
Facility Name:	Plants #3 and #4
Facility Location:	16024 Governor Harrison Parkway Lawrenceville, VA 23868
Registration Number:	30872
Permit Number:	PRO-30872

August 29, 2005
Effective Date

August 28, 2010
Expiration Date

Director, Department of Environmental Quality

Signature Date

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I. Facility Information

Permittee
Brick and Tile Corporation of Lawrenceville
1224 Brickyard Street
Lawrenceville, VA 23868

Responsible Official
Benjamin B. Powell
President

Facility
Brick and Tile Corporation of Lawrenceville
Plants #3 and #4
16024 Governor Harrison Parkway
Lawrenceville, VA 23868

Contact Person
Leon F. Williams
Vice President
434-840-3151

County-Plant Identification Number: 51-025-0027

Facility Description: NAICS Code 327121-Manufacturer of face brick, pavers, and various brick shapes.

This facility consists of two operating brick plants, Plants 3 and 4. Brick manufacturing consists of mining, which is done at other areas in the locality, followed by grinding, blending of raw materials, extrusion, cutting or shaping, drying, firing, packaging and shipping of the final product.

The facility is a Title V major source of PM 10, CO, HF, and HCl. This source is located in an attainment area for all pollutants, and is not subject to PSD. The facility has minor NSR construction permit dated August 16, 2004.

II. Emission Units

Equipment to be operated consists of:

Stack ID	Emission Unit Description / Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description / PCD ID	Pollutant Controlled	Applicable Permit Date
Brick Plant #3					
Plant #3 Truck Dumping and Crushing Equipment					
fugitive	Truck Dump Feeder Bin ES-3-TD	50 yd^3			8/16/2004
	Feeder from ES-3-TD to ES-3-C1 ES-3-F1	36" wide			8/16/2004
	Feeder to crusher ES-3-F2	36" wide			8/16/2004
	Feeder fed by front end loader from crushed storage ES-3-F3	36" wide			8/16/2004
	Feeder fed by front end loader from crushed storage ES-3-F4	36" wide			8/16/2004
	Feeder fed by front end loader from crushed storage ES-3-F6	36" wide			8/16/2004
	Conveyor from ES-3-F1 to ES-3-CR1 w/ 1 drop point ES-3-C1	48" wide			8/16/2004
	McClanahan Roll Crusher ES-3-CR1	300 tons/hr	Full Enclosure	PM/PM_{10}	8/16/2004 NSPS OOO
	Conveyor from ES-3-CR1 to ES-3-C2 w/1 drop point ES-3-C1A	36" wide			8/16/2004 NSPS OOO
	Conveyor from C1A to crushed material storage w/1 drop point ES-3-C2	36" wide			8/16/2004 NSPS OOO
Plant #3, Grinding Room Equipment					
EP-3-GR-BH	Conveyor from ES-3-F3, ES-3-F4 & ES-3-F6 to scalping screen w/1 drop point ES-3-C3	30" wide	Mikro-Pulsaire Type 400S1-220 TRH Fabric filter dust collection system with a maximum air flow capacity of 33,600 ACFM (ES-3-GR)	PM/PM10	8/16/2004 NSPS OOO
	Simplicity Scalping Screen ES-3-SS1	5' x 14'			8/16/2004 NSPS OOO
	Conveyor from scalping and finishing screens to feeder 5 w/ 1 drop point ES-3-C4	30" wide			8/16/2004 NSPS OOO
	Feeder to Hammermill ES-3-F5	36" wide			8/16/2004 NSPS OOO
	J.C. Steele Hammermill ES-3-HM	275 tons/hr			8/16/2004 NSPS OOO
	Conveyor from hammermill to C7 w/1 drop point ES-3-C6	36" wide			8/16/2004 NSPS OOO
	Conveyor from C6 to C8 w/1 drop point ES-3-C7	30" wide			8/16/2004 NSPS OOO
	Conveyor from C7 to finishing screens w/1 drop point ES-3-C8	30" wide			8/16/2004 NSPS OOO
	Leahy Model F1 Finishing Screen ES-3-FS1	5' x 8'			8/16/2004 NSPS OOO
	Leahy Model F1 Finishing Screen ES-3-FS2	5' x 8'			8/16/2004 NSPS OOO
	Leahy Model F1 Finishing Screen ES-3-FS3	5' x 8'			8/16/2004 NSPS OOO
	Leahy Model F1 Finishing Screen ES-3-FS4	5' x 8'			8/16/2004 NSPS OOO
	Leahy Model F1 Finishing Screen ES-3-FS5	5' x 8'			8/16/2004 NSPS OOO

Stack ID	Emission Unit Description / Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description / PCD ID	Pollutant Controlled	Applicable Permit Date
Brick Plant #3					
	Leahy Model F1 Finishing Screen ES-3-FS6	5' x 8'			8/16/2004 NSPS OOO
	Conveyor from finishing and scalping screens to C10 w/ 1 drop point ES-3-C9	30" wide			8/16/2004 NSPS OOO
	Conveyor to C11 w/ 1 drop point ES-3-C10	30" wide			8/16/2004 NSPS OOO
Plant #3, Ground Material Storage (225 tons/hr capacity)					
Fugitive	Front End loader ES-3-FL	4.5 yd^3			8/16/2004
	Conveyor from C10 to C12 or C13 w/2 drop points ES-3-C11	30" wide			8/16/2004 NSPS OOO
	Conveyor C11 to Brick Making Room w/1 drop point ES-3-C12	30" wide			8/16/2004 NSPS OOO
	Reversible conveyor to storage w/1 drop point ES-3-C13	30" wide			8/16/2004 NSPS OOO
Plant #3, Brick Making Room (58 tons/hr green brick)					
EP-3-MR-BH	Coating Station ES-3-CS1	1240 lbs-coatings/hr	Donaldson Company, Inc. fabric filter dust collection system w/maximum air flow of 17,000 ACFM	PM/PM10	8/16/2004
	Coating Station ES-3-CS2	1240 lbs-coatings/hr			8/16/2004
Plant #3, Brick Finishing Equipment					
EP-3-BD	Harrop Industries tunnel dryer with startup/backup heat burning natural gas and propane backup ES-3-BD	9 x 10^6 btu/hr heat input 14.8 tons fired brick/hr			8/16/2004
EP-3-K	Harrop Industries tunnel kiln with multigas burner (natural gas with propane backup) ES-3-K	25 x 10^6 btu/hr total heat input 14.8 tons fired brick/hr			8/16/2004 40 CFR 63 Subpart JJJJJ

Stack ID	Emission Unit Description / Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description / PCD ID	Pollutant Controlled	Applicable Permit Date
Plant #4					
Plant #4 Truck Dumping and Crushing Equipment					
fugitive	Truck Dump Feeder Bin ES-4-TD	50 yds^3			8/16/2004
	Feeder Bin for truck dumping ES-4-F1	5' x 22'			8/16/2004
	Feeder fed by front end loader from crushed storage ES-4-F2	400 ft^3			8/16/2004
	Feeder fed by front end loader from crushed storage ES-4-F3	400 ft^3			8/16/2004
	Conveyor w/1 drop point ES-4-C1	48 " wide			8/16/2004 NSPS OOO

Stack ID	Emission Unit Description / Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description / PCD ID	Pollutant Controlled	Applicable Permit Date
Plant #4					
N/A	McLanahan 24 x 48 shalemaster twin Roll Crusher ES-4-CR1	300 tons/hr	Full Enclosure N/A	PM/PM_{10}	8/16/2004 NSPS OOO
fugitive	Conveyor w/1 drop point ES-4-C2	48" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C3	48" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C5	40" wide			8/16/2004 NSPS OOO
	Reversing conveyor ES-4-C6SR	40" wide			8/16/2004 NSPS OOO
Plant #4, Grinding Room Equipment					
EP-4-GR-BH	JC Steele Hammer mill ES-4-HM	275 tons/yr	Donaldson-Day 232RF10 Baghouse with a maximum air flow capacity of 26.730 ACFM ES-4-GR	PM/PM10	8/16/2004 NSPS OOO
	Midwestern Scalping Screen ES-4-SS1	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Midwestern Finishing Screen ES-4-FS1	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Midwestern Finishing Screen ES-4-FS2	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Midwestern Finishing Screen ES-4-FS3	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Midwestern Finishing Screen ES-4-FS4	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Midwestern Finishing Screen ES-4-FS5	5' x 7' w/multiple screen decks			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C7	32" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C8	28" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C9	40" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C11	36" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C12	40" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C13	40" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C15	32" wide			8/16/2004 NSPS OOO
	Reversing Conveyor w/1 drop point ES-4-C16AR	32" wide			8/16/2004 NSPS OOO
Plant #4, Ground Material Storage					
Fugitive	Reclaimer Chain Conveyor ES-4-RC	85 tons-material/hr			8/16/2004
	Conveyor w/1 drop point ES-4-C16B	32" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C16C	32" wide			8/16/2004 NSPS OOO

Stack ID	Emission Unit Description Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description PCD ID	Pollutant Controlled	Applicable Permit Date
Plant #4					
	Reversing conveyor w/ 2 drop points ES-4-C18SR	32" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-18W	32" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C18E	32" wide			8/16/2004 NSPS OOO
	Conveyor w/1 drop point ES-4-C19 (head section)	32" wide			8/16/2004
Plant #4, Brick Making Room					
EP-4-MR-BH	Coating Station w/1 pickup point ES-4-CS1	58 tons green brick/hr	Donaldson-Day 156F10 Baghouse with a maximum air flow capacity of 14,138 ACFM. ES-4-MR	PM/PM10	8/16/2004
	Coating Station w/1 pickup point ES-4-CS2	58 tons green brick/hr			8/16/2004
	Coating Station w/1 pickup point ES-4-CS3	58 tons green brick/hr			8/16/2004
	Coating Station w/1 pickup point ES-4-CS4	58 tons green brick/hr			8/16/2004
	Coating Station w/1 pickup point ES-4-CS5	58 tons green brick/hr			8/16/2004
	Additive Feeder w/3 pickup points ES-4-AF1	58 tons green brick/hr			8/16/2004
	Additive Feeder w/3 pickup points ES-4-AF2	58 tons green brick/hr			8/16/2004
	Additive Feeder w/3 pickup points ES-4-AF3	58 tons green brick/hr			8/16/2004
	Additive Feeder w/3 pickup points ES-4-AF4	58 tons green brick/hr			8/16/2004
	Conveyor ES-4-C19 (tail section)	32" wide			8/16/2004
	Conveyor ES-4-C20	32" wide			8/16/2004
	Conveyor ES-4-C21	32" wide			8/16/2004
	Coating system with 30 pickup points ES-4-CS	58 tons green brick/hr			8/16/2004
	Sand blast booth with 2 pickup points ES-4-SB	58 tons green brick/hr			8/16/2004
	Bag filling station with 1 pickup point ES-4-BFS	58 tons green brick/hr			8/16/2004
EP-4-SS	Sand Silo ES-4-SS	1000 ft^3	Bin vent filter	PM/PM10	8/16/2004
Plant #4, Brick Finishing Equipment					
EP-4-BD1 EP-4-BD2	Ceric, Inc Twin Track Predryer and Dryer equipped with a supplemental heater and using natural gas and propane backup ES-4-BD	10×10^6 btu/hr heat input 14.8 tons fired brick/hr			8/16/2004

Stack ID	Emission Unit Description Emission Unit ID	Size/Rated Capacity	Pollution Control Device Description PCD ID	Pollutant Controlled	Applicable Permit Date
Plant #4					
EP-4-SCRB	Ceric, Inc. Standard Sand Seal tunnel Kiln using natural gas and propane backup ES-4-K	43.4 x 10^6 btu/hr total heat input 14.8 tons fired brick/hr	Hellmich HKD-R dry hydrated lime injection baghouse system w/ maximum air flow of 40,000 ACFM and maximum lime flow of 132 lbs/hr ES-4-SCRB	SO_2 , HCl, HF, PM, PM_{10}	8/16/2004 40 CFR 63 Subpart JJJJJ
EP-4-LS	Lime Storage silo ES-4-LS	36 tons lime transported/ hr	Bin vent filter	PM/PM_{10}	8/16/2004

III. Plant #3 Applicable Requirements

A. Limitations

1. **Emission Controls** – Particulate emissions from the Plant #3 grinding plant shall be controlled by building enclosure with a fabric filter dust collection system with a maximum air flow capacity of 33,600 ACFM. The control device shall be provided with adequate access for inspection and shall be in operation when the grinding plant is operating.
(9 VAC 5-50-260, Condition 3 of 8/16/04 NSR permit, 9 VAC 5-80-110)

2. **Emission Controls** – Particulate emissions from the Plant #3 texturing and coating equipment shall be controlled by a fabric filter dust collection system with a maximum air flow capacity of 18,029 ACFM. The control device shall be provided with adequate access for inspection and shall be in operation when the texturing and coating equipment is operating.
(9 VAC 5-50-260, Condition 4 of 12/29/04 NSR permit, 9 VAC 5-80-110)

3. **Control Efficiency** - The fabric filter dust collection system controlling the Plant #3 texturing and coating equipment shall maintain a control efficiency for particulate of no less than 99.0% percent, on a mass basis.
(9 VAC 5-50-260, Condition 5 of 8/16/04 NSR permit, 9 VAC 5-80-110)

4. **Fugitive Emission Controls** – Fugitive particulate emissions from the receipt of raw materials, primary crushing, and raw material storage for Plant #3 shall be controlled by respective building enclosures. Fugitive emissions from transferring raw materials between buildings shall be controlled by covered conveyors.
(9 VAC 5-50-260, Condition 6 of 8/16/04 NSR permit, 9 VAC 5-80-110)

5. **Production** - The production of fired brick from Plant #3 shall not exceed 110,000 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180, Condition 21 of 8/16/04 NSR permit, 9 VAC 5-80-110)

6. **Fuel** - The approved fuels for the Plant #3 tunnel dryer and tunnel kiln are liquefied petroleum gas (LPG) and natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1100, Condition 22 of 8/16/04 NSR permit, 9 VAC 5-80-110)

7. **Emission Limits** - Emissions from the operation of the Plant #3 tunnel kiln shall not exceed the limits specified below:

Particulate Matter/PM-10	21.3 lbs/hr	79.2 tons/yr
Sulfur Dioxide	9.9 lbs/hr	36.9 tons/yr
Nitrogen Oxides (as NO_2)	5.2 lbs/hr	19.3 tons/yr
Carbon Monoxide	17.8 lbs/hr	66.0 tons/yr
Volatile Organic Compounds	0.4 lbs/hr	1.3 tons/yr

Particulate emission limitations for this unit are based on information from both the filterable and condensable portions of stack test data.
(9 VAC 5-50-260, 9 VAC 5-60-320, Condition 25 of 8/16/04 NSR permit, 9 VAC 5-80-110)

8. **Emission Limits** - Emissions from the operation of the Plant #3 tunnel dryer shall not exceed the limits specified below:

Particulate Matter/PM-10	2.8 lbs/hr	10.3 tons/yr
Nitrogen Oxides (as NO_2)	1.5 lbs/hr	5.4 tons/yr
Carbon Monoxide	4.6 lbs/hr	17.1 tons/yr
Volatile Organic Compounds	0.5 lbs/hr	1.7 tons/yr

(9 VAC 5-50-260, Condition 26 of 8/16/04 NSR permit, 9 VAC 5-80-110)

9. **Emission Limits** - Emissions from the Plant #3 fabric filter dust collection system controlling the grinding room shall not exceed the limits specified below:

Particulate Matter/PM-10 0.02 grains/dscft	5.8 lbs/hr	8.6 tons/yr

(9 VAC 5-50-260, 9 VAC 5-50-410, Condition 27 of the 8/16/04 NSR permit, 40 CFR 60.672 (a)(1), 9 VAC 5-80-110)

10. **Emission Limits** - Emissions from the Plant #3 fabric filter dust collection system controlling the texturing and coating equipment shall not exceed the limits specified below:

Particulate Matter/PM-10 0.01 grains/dsc ft	1.6 lbs/hr	1.6 tons/yr

(9 VAC 5-50-260, Condition 28 of 8/16/04 NSR permit, 9 VAC 5-80-110)

11. **Plant #3 Combined Emission Limits** - Total emissions from the Brick Plant #3 shall not exceed the limits specified below:

Particulate Matter/PM-10	31.4 lbs/hr	99.7 tons/yr
Sulfur Dioxide	9.9 lbs/hr	36.9 tons/yr
Nitrogen Oxides (as NO_2)	6.6 lbs/hr	24.6 tons/yr
Carbon Monoxide	22.4 lbs/hr	83.1 tons/yr
Volatile Organic Compounds	0.8 lbs/hr	3.0 tons/yr

(9 VAC 5-50-260, VAC 5-60-320, Condition 29 of 8/16/04 permit, 9 VAC 5-80-110)

12. **Visible Emission Limit** - Visible emissions from the fabric filter dust collection system controlling the Plant #3 texturing and coating equipment and the Plant #3

tunnel kiln exhaust stack shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, Condition 37 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

13. **Visible Emission Limit** – Visible emissions from the exhaust of the baghouse controlling the Plant #3 grinding room equipment (ES-3-GR) shall not exceed 7 percent opacity as determined by EPA Reference Method 9 (reference 40 CFR 60, Appendix A.)
(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-50-410, Condition 38 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

14. **Visible Emission Limit** – Visible emissions from the Plant #3 roll crusher (ES-3-CR1) shall not exceed 15% opacity as determined by EPA Reference Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-410, 40 CFR 60.672(c), 9 VAC 5-80-110)

15. **Visible Emission Limit** – Visible emissions from the drop points associated with the following conveyors shall not exceed 10% opacity as determined by EPA Reference Method 9 (reference 40 CFR 60, Appendix A).

Emission Unit ID #
ES-3-C1A
ES-3-C2
ES-3-C11
ES-3-C12
ES-3-C13

(9 VAC 5-50-410, 40 CFR 60.672(b), 9 VAC 5-80-110)

16. **Applicability by Reference** – Commencing May 16, 2006, Plant #3 shall operate in compliance with all applicable standards and requirements listed in 40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing.
(9 VAC 5-60-100, 40 CFR 63.8390(b), 40 CFR 63.8390(d), 40 CFR 63.8395(b), 9 VAC 5-80-110)

B. Monitoring and Record Keeping

1. **Monitoring Devices** - The fabric filter dust collection system controlling the Plant #3 texturing and coating equipment (ES-3-MR) shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the control device is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, Condition 16 of 8/16/04 permit, 9 VAC 5-80-110)

2. **Monitoring Device Observation** - The devices used to continuously measure the differential pressure drop across the fabric filter controlling the Plant #3 texturing and coating equipment shall be observed by the permittee with a frequency of not less than once per day while the texturing and coating equipment is operating. The permittee shall keep a log of the observations.
(9 VAC 5-50-50 H, Condition 17 of 8/16/04 NSR permit, 9 VAC 5-80-110)

3. **Periodic Monitoring** – Visual emission checks from the following pieces of equipment shall be conducted monthly. Records shall be maintained on site stating the date and time of each visible emissions check and whether visible emissions were observed. If visible emissions are observed, the record shall include the cause of the emissions and the corrective action taken.

EU ID	EU Description
ES-3-CR1	McClanahan Roll Crusher
ES-3-C1A	Conveyor and drop points
ES-3-C2	Conveyor and drop points
ES-3-C11	Conveyor and drop points
ES-3-C12	Conveyor and drop points
ES-3-C13	Conveyor and drop points
ES-3-GR	#3 grinding room baghouse
ES-3-MR	#3 making room baghouse
EP-3-BD	#3 tunnel dryer
EP-3-K	#3 brick kiln

(9 VAC 5-80-110, 9 VAC 5-20-20)

C. Testing and Reporting

1. **Stack Test -** Performance tests shall be conducted for hydrogen fluoride from Plant #3 tunnel kiln to determine a conservative method for estimating hydrogen fluoride (HF) emissions. The tests shall be performed and reported within three years of the initial issuance date of the September 6, 2002 permit. If a new kiln is built adjacent to this brick plant, hydrogen fluoride test data from the new kiln may be used in lieu of testing Plant #3 tunnel kiln as long as adequate mass balance data for the raw material as described in Condition 60 of the 8/16/04 NSR permit also exists. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 and 9 VAC 5-60-70. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 60 days prior to testing. The test protocol shall include a discussion of methodology for comparing mass balance data, gathered in accordance with Condition 60 of the 8/16/04 NSR permit to testing data. One copy of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-80-1200, Condition 48 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

2. **Periodic Monitoring –** Once during the five year term of this permit, and once every five years thereafter, the permittee shall conduct performance tests for particulate (filterable), PM10, CO, and SO_2 to determine compliance with the emission limitations listed in Condition III.A.7 from the Plant #3 kiln, ES-K-3. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 and 9 VAC 5-60-70. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 60 days prior to testing. One copy of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110)

3. **Test Methods -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	**Test Method (40 CFR Part 60, Appendix A)**
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO_x	EPA Method 7
SO_2	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 22
Opacity	EPA Method 9

(9 VAC 5-80-110)

IV. Plant #4 Applicable Requirements

A. Limitations

1. **Emission Controls** – The Plant #4 tunnel kiln (ES-4-K) shall be equipped with a Hellmich HKD-R dry hydrated lime injection baghouse system (ES-4-SCRB) with a maximum air flow capacity of 40,000 ACFM and a maximum lime flow rate of 132 lbs/hr. The dry hydrated lime injection baghouse system (ES-4-SCRB) shall be provided with adequate access for inspection and shall be in operation when the Plant #4 tunnel kiln (ES-4-K) is operating.
(9 VAC 5-50-260, Condition 7 of 8/16/04 NSR permit, 9 VAC 5-80-110)

2. **Control Efficiency** – The dry hydrated lime injection baghouse system (ES-4-SCRB) shall demonstrate and maintain the following control efficiencies for the following pollutants:

Sulfur Dioxide (SO_2)	30.0%
Hydrogen Fluoride (HF)	90.0%

(9 VAC 5-50-260, Condition 8 of 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ Table 1, 9 VAC 5-80-110)

3. **Emission Controls** – Particulate emissions from the Plant #4 grinding room equipment, as listed in Condition 2 of the 12/29/2003 NSR permit and Part II of this permit, shall be controlled by a Donaldson-Day 232RF10 baghouse(ES-4-GR) with a maximum air flow capacity of 26,730 ACFM. The baghouse (ES-4-GR) shall be provided with adequate access for inspection and shall be in operation when the grinding room is operating.
(9 VAC 5-50-260, Condition 9 of 8/16/04 NSR permit, 9 VAC 5-80-110)

4. **Control Efficiency** - The baghouse controlling particulate emissions from the Plant #4 grinding room equipment (ES-4-GR) shall maintain and demonstrate a control efficiency for particulate of no less than 99.0 percent, on a mass basis.
(9 VAC 5-50-260, Condition 10 of 8/16/04 NSR permit, 9 VAC 5-80-110)

5. **Emission Controls** – Particulate emissions from the Plant #4 brick making room equipment, as listed in Condition 2 of the 12/29/2003 NSR permit and Part II of this permit, shall be controlled during dry coating operations by a Donaldson-Day 156F10 baghouse (ES-4-MR) with a maximum air flow capacity of 14,138 ACFM. The baghouse (ES-4-MR) shall be provided with adequate access for inspection and shall be in operation when the brick making room equipment is running dry coating operations.
(9 VAC 5-50-260, Condition 11 of 8/16/04 NSR permit, 9 VAC 5-80-110)

6. **Control Efficiency** - The baghouse controlling particulate emissions from the Plant #4 brick making room equipment (ES-4-MR) shall maintain and demonstrate a control efficiency for particulate of no less than 99.0 percent, on a mass basis.
(9 VAC 5-50-260, Condition 12 of 8/16/04 NSR permit, 9 VAC 5-80-110)

7. **Emission Controls** – Particulate emissions from the Plant #4 lime silo (ES-4-LS) and the Plant #4 sand silo (ES-4-SS) shall each be controlled by a bin vent filter. Each bin vent filter shall be provided with adequate access for inspection and shall be in operation when the respective silo is operating.
(9 VAC 5-50-260, Condition 13 of 8/16/04 NSR permit, 9 VAC 5-80-110)

8. **Emission Controls** – Particulate emissions from Plant #4 twin roll crusher (ES-4-CR1) shall be controlled by full enclosure. The twin roll crusher and enclosure shall be provided with adequate access for inspection. The twin roll crusher shall not be operated unless the full enclosure is secured with all doors and windows closed.
(9 VAC 5-50-260, Condition 14 of 8/16/04 NSR permit, 9 VAC 5-80-110)

9. **Production** - The production of fired brick from Plant #4 shall not exceed 129,648 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-1180, Condition 23 of 8/16/04 NSR permit, 9 VAC 5-80-110)

10. **Fuel** - The approved fuels for the Plant #4 tunnel kiln (ES-4-K) and the Plant #4 predryer and dryer (ES-4-BD) are natural gas and propane. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-1100, Condition 24 of 8/16/04 NSR permit, 9 VAC 5-80-110)

11. **Emission Limits** – Fugitive emissions from the operation of the Plant #4 truck dumping and crushing equipment, as listed in Condition 2 of the 8/16/04 NSR permit and Part II of this permit, shall not exceed the limits specified below:

Particulate Matter/PM_{10}	3.8 lbs/hr	16.6 tons/yr

Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in condition numbers 14, 23, 40, and 41 of the 8/16/04 NSR permit and condition numbers IV.A.8, IV.A.9, IV.A.19, and IV.A.20 of this permit.
(9 VAC 5-50-260, 9 VAC 5-50-410, Condition 30 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

12. **Emission Limits** - Emissions from the exhaust of the Torit DFO 3-24 baghouse controlling the Plant #4 grinding room equipment (ES-4-GR) shall not exceed the limits specified below:

Particulate Matter/PM_{10}	5.0 lbs/hr	22.1 tons/yr
0.022 grains/dscf		

(9 VAC 5-50-260, 9 VAC 5-50-410, Condition 31 of the 8/16/04 NSR permit, 40 CFR 60.672(a)(1), 9 VAC 5-80-110)

13. **Emission Limits** – Fugitive emissions from the operation of the ground material storage equipment, as listed in Condition 2 of the 8/16/04 NSR permit and Part II of this permit, shall not exceed the limits specified below:

Particulate Matter/PM_{10}	2.7 lbs/hr	11.8 tons/yr

Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in condition numbers 23 and 40 of the 8/16/04 NSR permit and condition numbers IV.A.9 and IV.A.19 of this permit.
(9 VAC 5-50-260, 9 VAC 5-50-410, Condition 32 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

14. **Emission Limits** - Emissions from the exhaust of the Donaldson-Day 156F10 baghouse controlling the Plant #4 brick making room equipment (ES-4-MR) shall not exceed the limits specified below:

Particulate Matter/PM_{10} 0.01 grains/dscf	1.2 lbs/hr	5.3 tons/yr

(9 VAC 5-50-260, Condition 33 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

15. **Emission Limits** - Emissions from the exhaust of the Plant #4 predryer and dryer, ES-4-BD, shall not exceed the limits specified below:

Particulate Matter	2.8 lbs/hr	12.1 tons/yr
PM_{10}	2.8 lbs/hr	12.1 tons/yr
Nitrogen Oxides (as NO_2)	1.5 lbs/hr	6.4 tons/yr
Carbon Monoxide (CO)	4.6 lbs/hr	20.1 tons/yr
Volatile Organic Compounds	0.4 lbs/hr	1.9 tons/yr

(9 VAC 5-50-260, Condition 34 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

16. **Emission Limits** - Emissions from the exhaust of the Plant #4 dry hydrated lime injection baghouse system (ES-4-SCRB) controlling the Plant #4 tunnel kiln (ES-4-K) shall not exceed the limits specified below:

Particulate Matter (0.12 lbs/ton fired brick)	1.8 lbs/hr	7.8 tons/yr
PM_{10} (0.12 lbs/ton fired brick)	1.8 lbs/hr	7.8 tons/yr
Sulfur Dioxide (SO_2)	6.9 lbs/hr	30.4 tons/yr
Nitrogen Oxides (as NO_2)	5.2 lbs/hr	22.7 tons/yr
Carbon Monoxide (CO)	17.8 lbs/hr	77.8 tons/yr
Volatile Organic Compounds	0.4 lbs/hr	1.6 tons/yr
Total Fluorides, excluding HF	0.7 lbs/hr	3.1 tons/yr
Hydrogen Fluoride (HF)	1.2 lbs/hr	5.1 tons/yr
Hydrogen Chloride (HCl) (0.056 lbs/ton fired brick)	0.83 lbs/hr	3.6 tons/yr

Particulate emission limitations for this unit are based on information from only the filterable portion of stack test data.
(9 VAC 5-50-260, 9 VAC 5-60-100, Condition 35 of the 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ Table 1, 9 VAC 5-80-110)

17. **Plant #4 Combined Emission Limits** - Total emissions from Plant #4 shall not exceed the limits specified below:

Particulate Matter/PM_{10}	17.3 lbs/hr	75.7 tons/yr
Sulfur Dioxide	6.9 lbs/hr	30.4 tons/yr
Nitrogen Oxides (as NO_2)	6.6 lbs/hr	29.0 tons/yr
Carbon Monoxide	22.3 lbs/hr	97.9 tons/yr
Volatile Organic Compounds	0.8 lbs/hr	3.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in the various conditions of this permit.
(9 VAC 5-50-260, Condition 36 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

18. **Visible Emission Limit -** Visible emissions from the exhaust of the baghouse controlling the Plant #4 grinding room equipment (ES-4-GR) shall not exceed 7 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, and 9 VAC 5-50-410, Condition 39 of the 8/16/04 NSR permit, 40 CFR 50.672(a)(2), 9 VAC 5-80-110)

19. **Visible Emission Limit -** Visible emissions from the following equipment shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

Emission Unit ID #	Equipment Description	Rated Capacity
ES-4-C1	Conveyor with 1 drop point	48” wide
ES-4-C2	Conveyor with 1 drop point	48” wide
ES-4-C3	Conveyor with 1 drop point	48” wide
ES-4-C5	Conveyor with 1 drop point	40” wide
ES-4-C6SR	Reversing conveyor with 1 drop point	40” wide
ES-4-C16B	Conveyor with 1 drop point	32” wide
ES-4-C16C	Conveyor with 1 drop point	32” wide
ES-4-C19	Conveyor with 1 drop point	32” wide
ES-4-C18SR	Reversing conveyor with 1 drop point	32” wide
ES-4-C18W	Conveyor with 1 drop point	32” wide
ES-4-C18E	Conveyor with 1 drop point	32” wide

(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-50-410, Condition 40 of the 8/16/04 NSR permit, 40 CFR 672(b), 9 VAC 5-80-110)

20. **Visible Emission Limit -** Visible emissions from the Plant #4 fully enclosed roll

crusher, ES-4-CR1, shall not exceed 15 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, 9 VAC 5-50-410, Condition 41 of the 8/16/04 NSR permit, 40 CFR 60.672(c), 9 VAC 5-80-110)

21. **Visible Emission Limit -** Visible emissions from the Plant #4 lime storage silo ES-4-LS and the Plant #4 sand storage silo ES-4-SS shall each not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, Condition 42 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

22. **Visible Emission Limit -** Visible emissions from the exhaust of the baghouse controlling the Plant #4 brick making room equipment, ES-4-MR, shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, Condition 43 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

23. **Visible Emission Limit –** There shall be no visible emissions from the exhaust of the dry hydrated lime injection baghouse controlling the Plant #4 tunnel kiln (ES-4-K) as determined by EPA Method 22 (reference 40 CFR 60, Appendix A).
(9 VAC 5-50-80, 9 VAC 5-50-260, Condition 44 of the 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ, Table 2, 9 VAC 5-80-110)

24. **MACT Compliance** – Plant #4 shall be in compliance with Subpart JJJJJ limitations at all times except during startup, shutdown, and malfunction.
(9 VAC 5-60-100, 40 CFR 63.8420(a))

25. **SSMP Plan** – The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP).
(9 VAC 5-60-100, 40 CFR 63.8420(c))

26. **OM&M Plan** – The permittee shall prepare and implement a written operations, maintenance, and monitoring (OM&M) plan. This plan shall be available for inspection upon request. The plan shall contain the following:

    a. A description of each process and air pollution control device (APCD) to be monitored;
    b. The type of monitoring device that will be used;
    c. A description of the operating parameters to be monitored;
    d. A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded;
    e. Limits for each parameter that represent continuous compliance with the emission limitations. Limits shall be based on values of the monitored parameter recorded during performance tests;
    f. Procedures for the proper operation and routine and long-term maintenance of the APCD, including maintenance and inspection schedules that are consistent with the manufacturer's recommendations;
    g. Performance and equipment specifications for the sample interface, the pollutant concentration, or parametric signal analyzer, and the data collection and reduction system;
    h. Continuous monitoring system performance evaluation procedures and acceptance criteria;
    i. Procedures for the proper operation and maintenance of monitoring equipment;

j. Continuous monitoring system data quality assurance procedures;
k. Continuous monitoring system record keeping and reporting procedures;
l. Procedures for responding to operating parameter deviations, including:

(1) Procedures for determining the cause of the operating parameter deviation.
(2) Actions for correcting the deviation and returning the operating parameters to the allowable limits
(3) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.

m. Procedures for keeping records to document compliance.
n. Procedures to take the scrubber, ES-4-SCRB, out of service for routine maintenance, including:

(1) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.
(2) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.

(9 VAC 5-60-100, 40 CFR 63.8420(d), 40 CFR 63.63.8425(b), 9 VAC 5-80-110)

27. **Requirements by Reference –** The permittee shall comply with all applicable requirements as listed in 40 CFR 63 Subpart A and noted in Table 7 of 40 CFR 63 JJJJJ.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.1.....	Applicability.....	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes.
§63.2.....	Definitions.....	Definitions for part 63 standards.....	Yes.
§63.3.....	Units and Abbreviations...	Units and abbreviations for part 63 standards.....	Yes.
§63.4.....	Prohibited Activities.....	Compliance date; circumvention; severability.....	Yes.
§63.5.....	Construction/ Reconstruction..	Applicability; applications; approvals.....	Yes.
§63.6(a).....	Applicability.....	General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major..	Yes.
§63.6(b)(1)-(4).	Compliance Dates for New and Reconstructed sources....	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.6(b)(5)...	Notification.....	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)...	[Reserved].....		
§63.6(b)(7)...	Compliance Dates for New and Reconstructed area Sources That Become Major.....	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources	Yes.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources....	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)-(4)	[Reserved].....		
§63.6(c)(5)...	Compliance Dates for Existing area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes.
§63.6(d).....	[Reserved].		
§63.6(e)(1)-(2)	Operation & Maintenance.....	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes.
§63.6(e)(3)...	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for startup, shutdown, and malfunction (SSM) and SSMP; content of SSMP	Yes.
§63.6(f)(1)...	Compliance Except During SSM.....	You must comply with emission standards at all times except during SSM	Yes.
§63.6(f)(2)-(3)	Methods for Determining Compliance.....	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g).....	Alternative Standard.....	Procedures for getting an alternative standard.....	Yes.
§63.6(h).....	Opacity/VE Standards.....	Requirements for opacity and VE standards.....	No, not applicable
§63.6(i).....	Compliance Extension.....	Procedures and criteria for Administrator to grant compliance extension.....	Yes.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.6(j).....	Presidential Compliance Exemption.....	President may exempt source category.....	Yes.
§63.7(a)(1)-(2)	Performance Test Dates.....	Dates for conducting initial performance testing and other compliance demonstrations; must conduct 180 days after first subject to rule	Yes.
§63.7(a)(3)...	Section 114 Authority.....	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)...	Notification of Performance Test.....	Must notify Administrator 60 days before the test.....	Yes.
§63.7(b)(2)...	Notification of Re-scheduling.....	Must notify Administrator 5 days before scheduled date of rescheduled date	Yes.
§63.7(c).....	Quality Assurance(QA)/Test Plan..	Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d).....	Testing Facilities...	Requirements for testing facilities.....	Yes.
§63.7(e)(1)...	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions	No, §63.8445 specifies requirements.
		Cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	Yes.
§63.7(e)(2)-(3)	Conditions for Con- ducting Performance Tests.....	Must conduct according to subpart and EPA test methods unless Administrator approves alternative; must have at least three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.....	Yes.
§63.7(f).....	Alternative Test Method.....	Procedures by which Administrator can grant approval to use an alternative test method	Yes.
§63.7(g).....	Performance Test Data Analysis.....	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the notification of compliance status	Yes.
§63.7(h).....	Waiver of Tests.....	Procedures for Administrator to waive performance test.....	Yes.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.8(a)(1)...	Applicability of Monitoring Requirements	Subject to all monitoring requirements in subpart.....	Yes.
§63.8(a)(2)...	Performance Specifications.....	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)...	[Reserved]		
§63.8(a)(4)...	Monitoring with Flares.....	Requirements for flares in §63.11 apply.....	No, not applicable.
§63.8(b)(1)...	Monitoring.....	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing and reporting on monitoring systems	Yes.
§63.8(c)(1)...	Monitoring System Operation and Maintenance	Maintenance consistent with good air pollution control practices	Yes.
§63.8(c)(1)(i).	Routine and Predictable SSM.....	Reporting requirements for SSM when action is described in SSMP	Yes.
§63.8(c)(1)(ii)	SSM not in SSMP.....	Reporting requirements for SSM when action is not described in SSMP	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How Administrator determines if source complying with operation and maintenance requirements	Yes.
§63.8(c)(2)-(3)	Monitoring System Installation.....	Must install to get representative emission and parameter measurements	Yes.
§63.8(c)(4)...	CMS Requirements.....	Requirements for CMS.....	No, §§63.8425 and 63.8465 specify requirements.
§63.8(c)(5)...	Continuous Opacity Monitoring System (COMS) Minimum Procedures	COMS minimum procedures.....	No, not applicable.
§63.8(c)(6)...	CMS Requirements.....	Zero and high level calibration check requirements.....	No, §63.8425 specifies requirements.
§63.8(c)(7)-(8)	CMS Requirements.....	Out-of-control periods.....	No, §63.8425 specifies requirements.
§63.8(d).....	CMS Quality Control..	Requirements for CMS quality control.....	No, §63.84255 specifies requirements.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.8(e).....	CMS Performance Evaluation.....	Requirements for CMS performance evaluation.....	No, §63.84255 specifies requirements.
§63.8(f)(1)-(5)	Alternative Monitoring Method....	Procedures for Administrator to approve alternative monitoring	Yes.
§63.8(f)(6)...	Alternative to Relative Accuracy Test.....	Procedures for Administrator to approve alternative relative accuracy test for continuous emissions monitoring systems (CEMS)	No, not applicable.
§63.8(g).....	Data Reduction.....	COMS and CEMS data reduction requirements.....	No, not applicable.
§63.9(a).....	Notification Requirements.....	Applicability; State delegation.....	Yes.
§63.9(b).....	Initial Notifications.....	Requirements for initial notifications.....	Yes.
§63.9(c).....	Request for Compliance Extension.....	Can request if cannot comply by date or if installed BACT/LAER	Yes.
§63.9(d).....	Notification of Special Compliance Requirements for New Source.....	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.....	Yes.
§63.9(e).....	Notification of Performance Test.....	Notify Administrator 60 days prior.....	Yes.
§63.9(f).....	Notification of VE/Opacity Test	Notify Administrator 30 days prior.....	No, not applicable.
§63.9(g)(1)...	Additional Notifications When Using CMS	Notification of performance evaluation	Yes.
§63.9(g)(2)-(3)	Additional Notifications When Using CMS.....	Notification of COMS data use; notification that relative accuracy alternative criterion were exceeded.....	No, not applicable.
§63.9(h).....	Notification of Compliance Status....	Contents; submittal requirements	Yes.
§63.9(i).....	Adjustment of Submittal Deadlines.....	Procedures for Administrator to approve change in when notifications must be submitted	Yes.
§63.9(j).....	Change in Previous Information.....	Must submit within 15 days after the change.....	Yes.
§63.10(a).....	Record keeping/Reporting	Applicability; general information.....	Yes.

Citation	Subject	Brief Description	Applies to Subpart JJJJJ?
§63.10(b)(1)...	General Record keeping Requirements....	General requirements.....	Yes.
§63.10(b)(2)(i) – (v)	Records Related to SSM.....	Requirements for SSM records.....	Yes.
§63.10(b)(2)(vi)-(xii) and (xiv)	CMS Records.....	Records when CMS is mal- functioning, inoperative or out-of-control	Yes.
§63.10(b)(2)(xiii)	Records.....	Records when using alternative to relative accuracy test.....	No, not applicable.
§63.10(b)(3)...	Records.....	Applicability Determinations.....	Yes.
§63.10(c)(1)-(15)	Records.....	Additional records for CMS.....	No, §§63.84255 and 63.8490 specify requirements.
§63.10(d)(1) and (2)	General Reporting Requirements..... ..	Requirements for and reporting; performance test results reporting	Yes.
§63.10(d)(3)...	Reporting Opacity or VE Observations	Requirements for reporting opacity and VE.....	No, not applicable.
§63.10(d)(4)...	Progress Reports.....	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)...	SSM Reports.....	Contents and submission.....	Yes.
§63.10(e)(1)- (3)	Additional CMS Reports.....	Requirements for CMS reporting.....	No, §§63.8425 and 63.8485 specify requirements.
§63.10(e)(4)...	Reporting COMS data..	Requirements for reporting COMS data with performance test data	No not applicable.
§63.10(f).....	Waiver for Record-keeping/Reporting...	Procedures for Administrator to waive...	Yes.
§63.11.....	Flares.....	Requirement for flares.....	No, not applicable.
§63.12.....	Delegation.....	State authority to enforce standards..	Yes.
§63.13.....	Addresses.....	Addresses for reports, notifications, requests.....	Yes.
§63.14.....	Incorporation by Reference..... .	Materials incorporated by reference.....	Yes.
§63.15.....	Availability of Information.....	Information availability; confidential information....	Yes.

(9 VAC 5-80-110, 40 CFR 63 Subpart JJJJJ Table 7, 60 CFR 63 Subpart A)

B. Monitoring and Record Keeping

1. **Periodic Monitoring –** Visual emission checks from the following pieces of equipment shall be conducted monthly. Records shall be maintained on site stating the date and time of each visible emissions check and whether visible emissions were observed. If visible emissions are observed, the record shall include the cause of the emissions and the corrective action taken.

EU ID	EU Description
ES-4-GR	#4 Grinding room baghouse
ES-4-MR	#4 Making room baghouse
ES-4-CR1	Roll Crusher
ES-4-C1	Conveyor and drop points
ES-4-C2	Conveyor and drop points
ES-4-C3	Conveyor and drop points
ES-4-C5	Conveyor and drop points
ES-4-C6SR	Conveyor and drop points
ES-4-C16B	Conveyor and drop points
ES-4-C16C	Conveyor and drop points
ES-4-C19	Conveyor and drop points
ES-4-C18SR	Conveyor and drop points
ES-4-C18W	Conveyor and drop points
ES-4-C18W	Conveyor and drop points
ES-4-C18	Conveyor and drop points

(9 VAC 5-80-110, 9 VAC 5-20-20)

2. **Monitoring Devices** - The baghouse controlling the Plant #4 brick making room (ES-4-MR) shall be equipped with devices to continuously measure the differential pressure drop across the baghouse. The baghouse controlling the Plant #4 grinding room (ES-4-GR) shall also be equipped with devices to continuously measure the differential pressure drop across the baghouse. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when each control device is operating.
(9 VAC 5-80-1180, 9 VAC 5-50-20 C, 9 VAC 5-50-260, Condition 18 of 8/16/04 NSR permit, 9 VAC 5-80-110)

3. **Monitoring Device Observation** - The monitoring devices used to continuously measure the differential pressure across the baghouse controlling the Plant #4 brick making room (ES-4-MR) and the baghouse controlling the Plant #4 grinding room (ES-4-GR) shall each be observed by the permittee with a frequency of not less than once per day that the equipment being controlled operates. The permittee shall keep logs of the observations from each of the devices used to continuously measure the differential pressure across the baghouse controlling the brick making room (ES-4-MR) and the baghouse controlling the grinding room (ES-4-GR).
(9 VAC 5-50-50 H, Condition 19 of 8/16/04 NSR permit, 9 VAC 5-80-110)

4. **Monitoring Observations** – The permittee shall create and maintain the following observations, records, and logs:

   a. The permittee shall observe the exhaust of the dry hydrated lime injection baghouse (ES-4-SCRB) with a frequency of not less than once per operating day while the kiln is under normal operating conditions. The stack must be observed at least 15 minutes and in accordance with Method 22 of Appendix A, 40 CFR 60. If no visible emissions are observed in 30 consecutive daily Method 22 tests, the permittee may decrease the frequency of observations from daily to weekly. If any visible emissions are observed during weekly tests, the permittee must promptly initiate and complete corrective actions in accordance with the OM&M plan. If visible emissions are observed during any test, the permittee must report these deviations. The frequency of observation shall revert back to daily until the permittee can demonstrate that no visible emissions are observed in 30 consecutive daily tests, at which point in time the frequency of observations may be reduced to weekly. The permittee shall keep logs of times, dates, and results of daily examinations.

   b. The permittee shall continuously monitor the flow of lime to the auger of the dry hydrated lime injection baghouse (ES-4-SCRB). The monitoring device shall be equipped with an alarm that shall sound whenever lime is not free flowing, and the permittee shall promptly initiate and complete the corrective actions in the OM&M plan. The output from the monitor of the flow of lime to the auger shall be continuously recorded.

   c. Once per shift, the feeder setting of the lime feed system shall be recorded. The feeder setting shall be maintained at or above the level established during the most recent performance test showing compliance with this permit. The permittee shall keep logs of the once-per-shift feeder setting observations. The permittee shall meet the following requirements for the lime feed rate measurement device:

      (1) The permittee shall locate the measurement device in a position that provides a representative feed rate measurement;

      (2) At least semiannually, the permittee shall conduct a calibration check.

   (9 VAC 5-50-50 H, 9 VAC 5-60-100,Condition 20 of 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ, Table 5, #2, 40 CFR 63.8470(g), 40 CFR 63.8450(f), 9 VAC 5-80-110)

5. **OM&M Plan -** The permittee shall install, operate, and maintain each continuous monitoring system (CMS) according to the OM&M plan and shall meet the following requirements:

   a. Conduct a performance evaluation of each CMS according to the OM&M plan;
   b. The CMS must complete a minimum of one cycle of operation for each successive 15 minute period. To have a valid hour, the permittee must have at least 3 of 4 equally spaced data values or at least 75 percent if more than 4 data values per hour are collected, not including startup, shutdown, malfunction, out of control periods, or periods of routine control device maintenance).

c. The permittee shall determine and record the 3 hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3 hour average period, the permittee must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out of control periods, or periods of routine control device maintenance).

d. The permittee shall record the results of each inspection, calibration and validation check.

e. At all times, the permittee must maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(9 VAC 5-60-100, 40 CFR 63.8450(a), 9 VAC 5-80-110)

6. **Data Collection -** Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall monitor continuously or collect data at all required intervals at all times that the Plant #4 kiln, ES-4-K, is operating. This includes startup, shutdown, and malfunction.
(9 VAC 5-60-100, 40 CFR 63.8465(b), 9 VAC 5-80-110)

7. **SSMP Plan -** During periods of startup, shutdown, and malfunction, Plant #4 must be operated according to the Startup, Shutdown, and Malfunction Plan (SSMP).
(9 VAC 5-60-100, 40 CFR 63.8470(d), 9 VAC 5-80-110)

8. **SSMP Plan Deviation -** Deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director, Piedmont Regional Office's satisfaction that the facility was operating according to an SSMP and an OM&M plan. The Director, Piedmont Region shall determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations.
(9 VAC 5-60-100, 40 CFR 63.8470(e))

9. **Record Keeping -** The permittee shall keep the following records for Plant #4. These records must be kept for a minimum of 5 years.

a. A copy of each notification and report submitted to comply with 40 CFR 63 Subpart JJJJJ, to include all documentation supporting any Initial Notification or Notification of Compliance Status submitted;

b. The records related to startup, shutdown, and malfunction as described in 40 CFR 63.6(e)(3)(iii) through 40 CFR 63.6(e)(3)(v);

c. Records of performance tests as required by 63.10(b)(2)(viii);

d. Records relating to control device maintenance and documentation of the approved routine control device maintenance exemption

e. For each deviation of an operating limit parameter value, the date, time , and duration of the deviation, a brief explanation of the cause of the deviation, and the corrective action taken, and whether the deviation occurred during a period of startup, shutdown, or malfunction;

f. Records of maintenance and inspections performed on the scrubber ES-4-SCRB.

g. Current copies of the SSMP and the OM&M plan, including any revisions, with records documenting performance.

(9 VAC 5-60-100, 40 CFR 63.8490, 40 CFR 63.8495, 9 VAC 5-80-110)

C. Testing

1. **Stack Test -** Initial performance tests shall be conducted for particulate matter, PM_{10} , carbon monoxide, sulfur dioxide, hydrogen fluoride, and hydrogen chloride from the exhaust of the dry hydrated lime injection baghouse (ES-4-SCRB) controlling the Plant #4 tunnel kiln (ES-4-K) to determine compliance with the emission limits and control efficiency requirements contained in Conditions 35 and 8 of the 8/16/04 NSR permit and Conditions IV.A.2 and IV.A.16 of this permit. The tests shall be performed and demonstrate compliance no later than 180 days after initial start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and 9 VAC 5-60-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410 and 9 VAC 5-60-70. The details of the tests are to be arranged with the Director, Piedmont Region. During the test runs the permittee shall record the lime feeder setting. The test results shall contain records of this parameter. The permittee shall submit a test protocol at least 60 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-80-1200, Condition 54 of the 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ Table 4 #2, 9 VAC 5-80-110)

2. **Stack Testing -** After the initial demonstration, performance tests required in Condition IV.C.1 shall be performed every 5 years.
(9 VAC 5-60-100, 40 CFR 63.8440(a), 9 VAC 5-80-110)

3. **Stack Testing -** Prior to performance testing, the permittee shall install and calibrate all monitoring equipment.
(9 VAC 5-60-100, 40 CFR 63.8445(b), 9 VAC 5-80-110)

4. **Stack Testing -** Performance testing as required by Condition IV.C.1 shall be conducted while operating at the maximum production level.
(9 VAC 5-60-100, 40 CFR 63.8445(d), 9 VAC 5-80-110)

5. **Stack Testing -** Testing shall not be conducted during periods of startup, shutdown, or malfunction.
(9 VAC 5-60-100, 40 CFR 63.8445(e), 9 VAC 5-80-110)

6. **Stack Testing -** Each test as required by Condition IV.C.1 of this permit shall consist of 3 runs, and each run must last at least an hour.
(9 VAC 5-60-100, 40 CFR 63.8445(f), 9 VAC 5-80-110)

7. **Stack Testing** - The permittee shall use data from tests required by Condition IV.C.1 of this permit and the following equations to determine compliance for Kiln #4 (ES-4-K).

   a. For production based emission limits, the permittee shall use MP=ER/P where:

MP = Mass per unit of production, lbs of pollutant per ton of fired product
ER = Mass emission rte of pollutant during each performance test lbs per hour
P = Production rate during each performance test run, tons of fired product per hour

b. For percent reduction emission limits, the permittee shall use $PR=(ER_i – ER_o)/ER_i$ where:

PR = Percent reduction, percent
ER_i = mass emission rate of specific HAP entering ES-4-SCRB, lbs per hour
ER_o = mass emission rate of specific HAP exiting ES-4-SCRB, lbs per hour

(9 VAC 5-60-100, 40 CFR 63.8445(g), 9 VAC 5-80-110)

8. **Stack Testing -** For Plant #4, the permittee shall determine the production rate during each test run required by Condition IV.C.1 of this permit, include production data collected during the performance tests in the test report, and shall record the production rate on a fired product basis of the kiln for each of the three test runs.
(9 VAC 5-60-100, 40 CFR 63 Subpart JJJJJ, Table 3, #2, 9 VAC 5-80-110)

9. **Stack Testing -** For Plant #4, the permittee shall:

a. Establish the operating limit for the lime feeder setting,
b. Record data from the lime feeder during the performance test, and
c. Ensure that the lime in the feed hopper or silo to the scrubber is free flowing at all times during the performance test.
d. Record the feeder setting for the three test runs;
e. If the feed rate setting varies during the three test runs, the permittee must determine and record the average feed rate form the three test runs.

(9 VAC 5-60-100, 40 CFR 63 Subpart JJJJJ Table 3, #4, 9 VAC 5-80-110)

10. **Test Ports -** The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

11. **Test Methods -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
NO_x	EPA Method 7
SO_2	EPA Method 6
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17
Visible Emissions	Method 22
HF	EPA Methods 26A, 320
HCl	EPA Methods 26A, 320
Opacity	EPA Method 9

(9 VAC 5-80-110, 40 CFR 63 Subpart JJJJJ Table 3)

D. Reporting

1. **Deviations -** The permittee shall report each instance in which Plant #4 did not meet each emission limit and each operating limit, including periods of startup, shutdown, malfunction, and routine control device maintenance. These instances shall be considered deviations from the emission limitations in 40 CFR 63 Subpart JJJJJ.
(9 VAC 5-60-100, 40 CFR 63.8470(c), 9 VAC 5-80-110)

2. **Notification of Compliance Status -** The permittee shall submit a Notification of Compliance Status, including performance test results, before the close of business on the 60th calendar day following the completion of the performance test. The Notification of Compliance Status shall also contain the operating limit parameter values established for ES-4-SCRB with supporting documentation and a description of the procedure used to establish the values.
(9 VAC 5-60-100, 40 CFR 63.8480(e), 40 CFR 63.10(d)(2), 9 VAC 5-80-110))

3. **Semiannual Compliance Report -** Semiannually the permittee shall submit a Compliance Report as follows:

   a. The first compliance report must cover the period beginning with startup and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months.

   b. The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending June 30 and December 31, respectively.

   c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

d. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.

(9 VAC 5-60-100, 40 CFR 63.8485(b)(1), 9 VAC 5-80-110)

4. **Semiannual Compliance Report -** The semiannual compliance reports shall contain the following information:

a. Company name and address;

b. Statement by a responsible official with that official's name, title, and signature, certifying that, based on the information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete;

c. Date of report and beginning and ending dates of the reporting period;

d. If a startup, shutdown or malfunction occurred during the compliance period and actions were consistent with the OM&M and SMPP, the report must include information in 40 CFR 63.10(d)(5)(i);

e. A description of control device maintenance performed while ES-4-SCRB was offline and the kiln ES-4-K was running, including the information below:

(1) The date and time when the control device was shutdown and restarted;
(2) Identification of the kiln that was operating and the number of hours that the kiln operated wile the control device was offline;

f. If there are no deviations from any emission limitations or operating limits, the compliance report shall contain a statement that there were no deviations from the emission limitations during the reporting period;

g. If there were no periods during which the CMS was out-of-control as specified in the OM&M plan, the compliance report shall contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(9 VAC 5-60-100, 40 CFR 63.8485(c), 40 CFR 63.10(d)(5)(i), 40 CFR 63 Subpart JJJJJ Table 6 #1a, 9 VAC 5-80-110)

5. **Deviation Reporting -** For each deviation from an emission limit or operating limit occurring at Plant #4, the permittee must include the following information in the compliance report. This includes periods of startup, shutdown, and malfunction.

a. The total operating time of ES-4-K during the reporting period;

b. The date and time that each malfunction started and stopped;

c. The date and time that each CMS was inoperative, except for zero(low-level) and high-level checks;

d. The date, time, and duration that each CMS was out-of-control including

the pertinent information in the OM&M plan;

e. The date and time that each deviation started and stopped and whether each deviation occurred during a period of startup, shutdown, or malfunction; or during another period.

f. A description of corrective action taken;

g. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

h. A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other know causes, and other unknown causes;

i. A summary of the total duration of the CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

j. A brief description of the process units;

k. A brief description of the CMS;

l. The date of the latest CMS certification or audit;

m. A description of any changes in CMS, processes, or control equipment since the last reporting period.

(9 VAC 5-60-100, 40 CFR 63.8485(e), 40 CFR 63 Subpart JJJJJ Table 6, #1.b. and c., 9 VAC 5-80-110)

6. **SSM Reporting -** The permittee shall submit by fax or telephone within 2 working days an immediate startup, shutdown, and malfunction report if actions during a startup, shutdown, or malfunction are not consistent with the SSMP. The report must contain the following information:

a. Name, title, and signature of the permittee or other responsible official who is certifying its accuracy;

b. Explanation of the circumstances of the event;

c. Reasons for not following the SSM plan;

d. Description of all excess emissions and/or parameter monitoring exceedances which are believed to have occurred;

(9 VAC 5-60-100, 40 CFR 63 Subpart JJJJJ Table 6 #2.a, 40 CFR 63.10(d)(5)(ii), 9 VAC 5-80-110)

7. **SSM Reporting -** The permittee shall submit by letter within 7 working days after the end of the event, unless other arrangements have been made with the Director, Piedmont Region, a startup, shutdown, and malfunction report if actions during a startup, shutdown, or malfunction are not consistent with the SSMP.

The letter must contain the following information:

a. Name, title, and signature of the permittee or other responsible official who is certifying its accuracy;

b. Explanation of the circumstances of the event;

c. Reasons for not following the SSM plan;

d. Description of all excess emissions and/or parameter monitoring exceedances which are believed to have occurred;

(9 VAC 5-60-100, 40 CFR 63 Subpart JJJJJ Table 6 #2.b, 40 CFR 63.10(d)(5)(ii), 9 VAC 5-80-110)

V. Facility Wide Conditions

A. Limitations

1. **Fugitive Dust Emission Controls** - Fugitive emission controls for Plant #3 and Plant #4 shall include the following, or equivalent, as a minimum:

   a. Dust from material handling and load-outs shall be controlled as specified in this permit.

   b. All material being stockpiled shall be kept adequately moist to control dust during storage and handling or covered at all times to minimize emissions.

   c. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.

   d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

   (9 VAC 5-50-260, 9 VAC 5-50-20, 9 VAC 5-50-90, Condition 15 of 8/16/04 NSR permit, 9 VAC 5-80-110)

2. **Requirements by Reference** – Except where the NSR permit dated 8/16/04 is more restrictive than the applicable requirement, the permittee shall operate the designated equipment listed in Condition 2 of the 8/16/04 NSR permit and Part II of this permit in compliance with 40 CFR 60, Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants and 40 CFR 63, Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing.
(9 VAC 5-50-400, 9 VAC 50-50-410, 9 VAC 5-60-100, Condition 45 of the 8/16/04 NSR permit, 9 VAC 5-80-110)

B. Monitoring and Record keeping

1. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

   a. Annual production of fired brick from Plant #3, calculated monthly as the sum of each consecutive 12 month period.

   b. Annual production of fired brick from Plant #4, calculated monthly as the sum of each consecutive 12 month period.

   c. Operation and control device monitoring records for the fabric filter dust collection systems controlling the Plant #3 grinding room and the Plant #3 texturing and coating equipment, including pressure drop observations.

   d. Operation and control device monitoring records, including pressure drop observations, for the Plant #4 baghouses designated ES-4-GR and ES-

4-MR, including records showing the periods when the baghouse ES-4-MR was not in operation while the brick making room was running operations other than dry coating operations.

e. Operation and control device monitoring records for the Plant #4 dry hydrated lime injection baghouse system designated ES-4-SCRB as described in Condition 20 of the 8/16/04 NSR permit and in Condition IV.B.4 of this permit.

f. Test data showing raw material fluoride and sulfur content and material balance information as described in Conditions 59 and 60 of the 8/16/04 NSR permit.

g. Results of all monthly visible emission checks.

h. All emission factors, formulas, and calculations used to show compliance with the emission limitations in this permit.

i. Results of all stack tests, visible emission evaluations and performance evaluations.

j. Scheduled and unscheduled maintenance, and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50, Condition 46 of the 8/16/04 NSR permit, 40 CFR 63 Subpart JJJJJ Table 5 #2, 9 VAC 5-80-110)

VI. Insignificant Emission Units

This facility does not have any insignificant emission units as defined under 9 VAC 5-80-720.

VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit. The permittee has not specifically identified any applicable requirements as being not applicable to this permitted facility.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

VIII. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

1. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

2. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

3. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

4. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

5. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

6. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Record keeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.
   b. The date(s) analyses were performed.
   c. The company or entity that performed the analyses.
   d. The analytical techniques or methods used.
   e. The results of such analyses.
   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **July 31st** and **January 31st** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      (1) Exceedance of emissions limitations or operational restrictions;
      (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
      (3) Failure to meet monitoring, record keeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

   (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee

shall submit to EPA and DEQ no later than March 1st each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Piedmont Region within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VIII.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and

9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Region.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted

to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15th of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

   d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for

changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)